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10/822,684

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Kyu-yeob Jeong

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12/28/2005

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EXAMINER

WRIGHT, INGRID D

ART UNIT

PAPER NUMBER

2835

DATE MAILED: 12/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/822,684

Applicant(s)

JEONG, KYU-YEOB

Examiner

Ingrid Wright

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 4/13/04.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 6, 7, 14-16, 27, 29 and 30 is/are rejected.
- 7) ☒ Claim(s) 2-5, 8-13, 17-26 and 28 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 4/13/04 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>4/13/04, 10/11/05</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,6,16 & 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Swindler US 5317483.

With respect to claim 1, Swindler teaches a computer (see, fig. 1, col. 3, lines 45-54), including a casing (12) forming an outer appearance and having a main board attaching surface (10) to which a main board (not labeled) is attached, comprising: a main board supporting unit (not labeled) provided on the main board attaching surface (10) to support the main board (not labeled); a holder having a lock (34), slidably combined to the main board attaching surface (10), and preventing the main board (not labeled) from moving; and a guide (see, fig. 1) formed on the main board attaching surface (10) at a position spaced from the main board (not labeled) to guide the holder, the lock (34) being locked to the guide (see, fig. 1).

With respect to claim 6 & 27, Swindler teaches a combining unit to attach the main board to the main board attaching surface (10), wherein the combining unit includes: at least one boss hole formed on the main board; and at least one boss (30) protruding from the main board attaching surface (10) and inserted into the boss hole (see, col. 4, lines 54-60).

With respect to claim 16, Swindler teaches a computer casing (12) (see, fig.1), having a main board attaching surface (10) to which a main board (not labeled) is attached by a

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user, comprising: a main board supporting unit (not labeled) provided on the main board attaching surface (10) to support the main board (not labeled) in an initial position and in a holding position, which is achieved when the main board (not labeled) is slid along the main board attaching surface from the initial position; a holder having a lock (34), to be slidably combined to the main board attaching surface (10) by the user, to thereby prevent the main board (not labeled) from becoming unintentionally detached from the holding position; and a guide, formed on the main board attaching surface (10) at a position which is spaced from the main board (not labeled), to guide (see, fig. 1) the holder, until the lock (34) is locked to the guide.

2. Claim 30 is rejected under 35 U.S.C. 102(b) as being anticipated by Swindler US 5317483.

Regarding the method claim 30, the method steps recited in the claims are inherently necessitated by the device structure as taught by Swindler. Swindler disclosed (fig. 2) a main board (not labeled) attached onto a main board attaching surface (10) of a computer; the main board (not labeled) placed on the main board attaching surface (10) in an initial position; the main board (not labeled) slid from the initial position to a holding position; and the main board (not labeled) locked in place.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 7,14,15 & 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Swindler US 5317483 in view of Perez et al. US 6385051 B1.

With respect to claims 7,14,15 & 29, Swindler teaches, in regards to all the limitations of claim 1 and claim 6 above, a boss (30).

Swindler is silent as to the boss including: a column protruding from the main board attaching surface, a head having a larger diameter than that of the column, and a recession circumferentially formed between the column and the head, and the boss hole includes: a broad section having a larger width than the diameter of the head of the boss, and a narrow section, having a smaller width than the diameter of the broad section, which communicates with the broad section.

Perez et al. teaches (see, fig. 1,3) a column (48) protruding from a main board attaching surface (16), a head (52) having a larger diameter than that of a column (48), and a recession (50) circumferentially formed between the column (48) and the head (52), and the boss hole (see, fig. 6) includes: a broad section having a larger width than the diameter of the head (52) of the boss (36), and a narrow section, having a smaller width than the diameter of the broad section, which communicates with the broad section (see, col. 3, lines 43-58).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize a column and a head as taught by Perez et al. in the invention of Swindler, in order to provide a mounting support for a mounting assembly (see, col. 3, lines 43-58).

Allowable Subject Matter

4. Claims 2-5,8-13,17-26, & 28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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The following is a statement of reasons for the indication of allowable subject matter:

Regarding claims 2-5,8-13,17-26 & 28, claim 2 recites: "wherein, the lock is plural in number and the holder comprises: a main body having the locks respectively formed in opposite sides thereof; a pair of first grips upwardly extended from each lock and forcing the pair of locks to move toward and away from each other; a holding part provided at an end of the main body between the pair of first grips to hold one edge of the main board; a second grip protruding from an upper surface of the main body at a position opposite to the holding part and pushing the main body to slide; and an elongated guide hole formed on the main body between the holding part and the second grip to slidably guide the holder," claim 3 recites: "wherein the guide comprises: a pair of latches being apart from each other, which correspond to the width of the holder and to which the locks of the holder are locked; and a guiding projection protruding from the main board attaching surface between the pair of latches and which is inserted into the elongated guide hole of the holder to slidably guide the holder," claim 4, recites: "wherein each latch is formed by bending the main board attaching surface upwardly to accommodate the edge of the main body, and the pairs of latches are plurally arranged at intervals along a lengthwise direction of the holder," claim 5 recites: "wherein the guiding projection comprises an extension protruding from the main board attaching surface, and an insert extended from the extension, which has a larger diameter than that of the extension, and the elongated guide hole includes an insertion section having a larger width than the diameter of the insert, and a moving section communicated with the insertion section and having a width smaller than that of the insert," claim 8 recites: "wherein the holder comprises a main body having the locks respectively formed in opposite sides thereof," claim 9 recites: "a pair of first grips upwardly extended from

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each lock, which allows the pair of locks to move toward and away from each other,"

claim 10, recites: "a holding part provided at an end of the main body between the pair of first grips to hold one edge of the main board," claim 11 recites: "a second grip, which protrudes from an upper surface of the main body at a position which is opposite to the holding part, pushing the main body to slide," claim 12 recites: "wherein the guide comprises a pair of latches, positioned apart from each other, which correspond to the width of the holder and to which the locks of the holder are locked," claim 13 recites: "wherein the guiding projection comprises an extension protruding from the main board attaching surface, and an insert extended from the extension and having a diameter larger than that of the extension," claim 17 recites: "wherein the lock is plural in number and the holder comprises a main body having the locks respectively formed in opposite sides thereof," claim 18 recites: "a pair of first grips upwardly extended from each lock, which forces the pair of locks to move toward and away from each other,"

claim 19 recites: "a holding part provided at an end of the main body between the pair of first grips to hold one edge of the main board," claim 20 recites: "a second grip, which protrudes from an upper surface of the main body at a position which is opposite to the holding part, pushing the main body to slide," claim 21 recites: "an elongated guide hole formed on the main body between the holding part and the second first grip,"

claim 22 recites: "wherein the guide comprises a pair of latches, positioned apart from each other, which correspond to the width of the holder and to which the locks of the holder are locked," claim 23 recites: "a guiding projection protruding from the main board attaching surface between the pair of latches and inserted into the elongated guide hole of the holder to slidably guide the holder," claim 24 recites: "wherein each of the latches is formed by bending the main board attaching surface upwardly to accommodate the edge of the main body, and the pairs of latches are arranged at

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intervals along a lengthwise direction of the holder,” claim 25 recites: “wherein the guiding projection comprises an extension protruding from the main board attaching surface, and an insert extended from the extension and having a diameter larger than that of the extension,” and claim 26 recites: “wherein the elongated guide hole includes an insertion section having a larger width than the diameter of the insert, and a moving section which communicates with the insertion section and has a smaller width than that of the insert.” These limitations in combination with all remaining limitations of claims 2-5,8-13,17-26 & 28 are believed to render claims 2-5,8-13,17-26 & 28 and all claims dependent therefrom patentable over the art of record.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Chen US 20020075638 A1 shows the state of the art regarding circuit boards mounted in a chassis.
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ingrid Wright whose telephone number is (571)272-8392. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild can be reached on (571)272-2800, ext 35. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status

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12/20/05
IDW

Lisa Lea-Edmonds
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PRIMARY EXAMINER